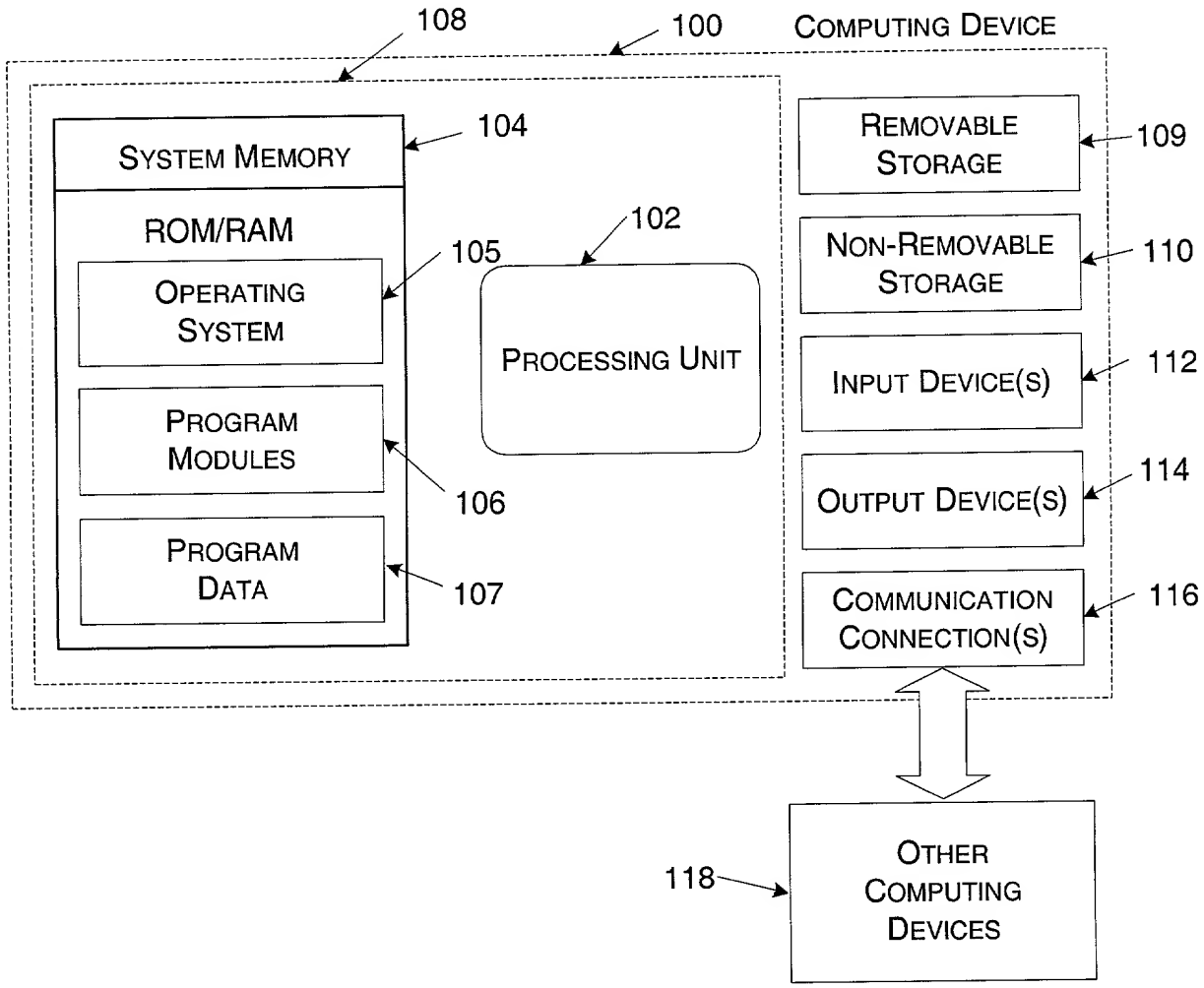
108
100
COMPUTING DEVICE
SYSTEM MEMORY
104
ROM/RAM
105
OPERATING SYSTEM
PROGRAM MODULES
106
PROGRAM DATA
107
102
PROCESSING UNIT
REMOVABLE STORAGE
109
NON-REMOVABLE STORAGE
110
INPUT DEVICE(S)
112
OUTPUT DEVICE(S)
114
COMMUNICATION CONNECTION(S)
116
118
OTHER COMPUTING DEVICES

Fig.1

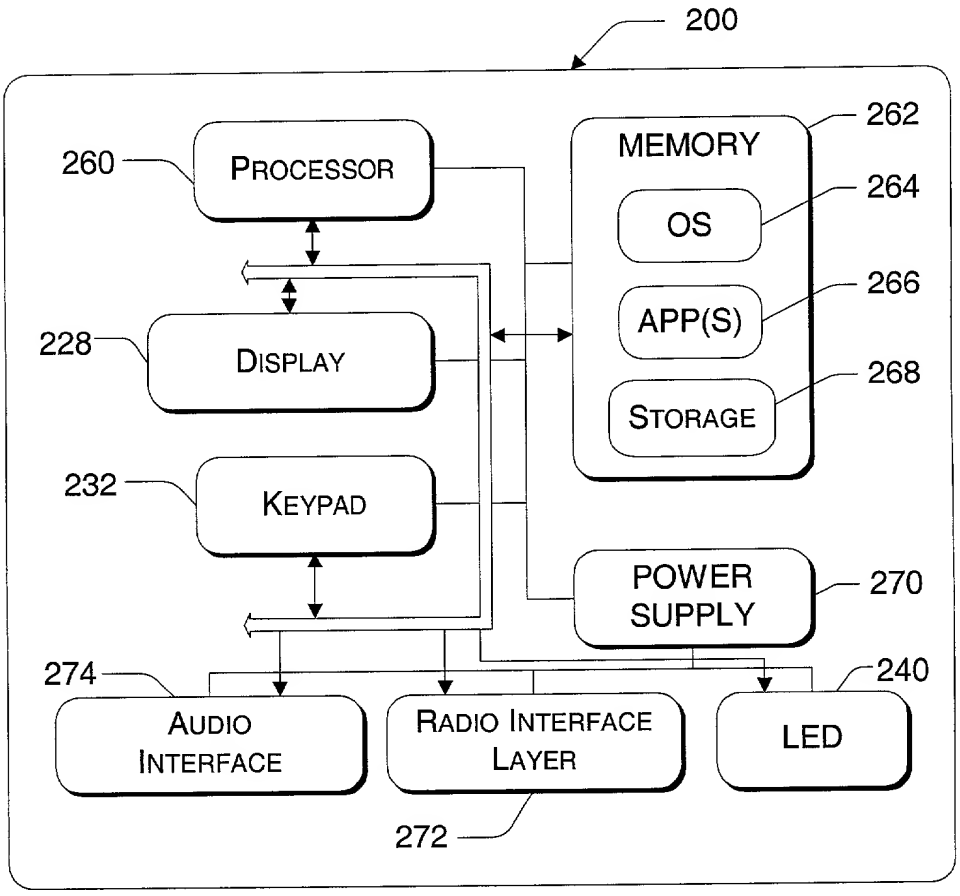
200
260
PROCESSOR
MEMORY
262
264
OS
266
APP(S)
228
DISPLAY
268
STORAGE
232
KEYPAD
POWER SUPPLY
270
274
240
AUDIO INTERFACE
RADIO INTERFACE LAYER
LED
272

Fig.2

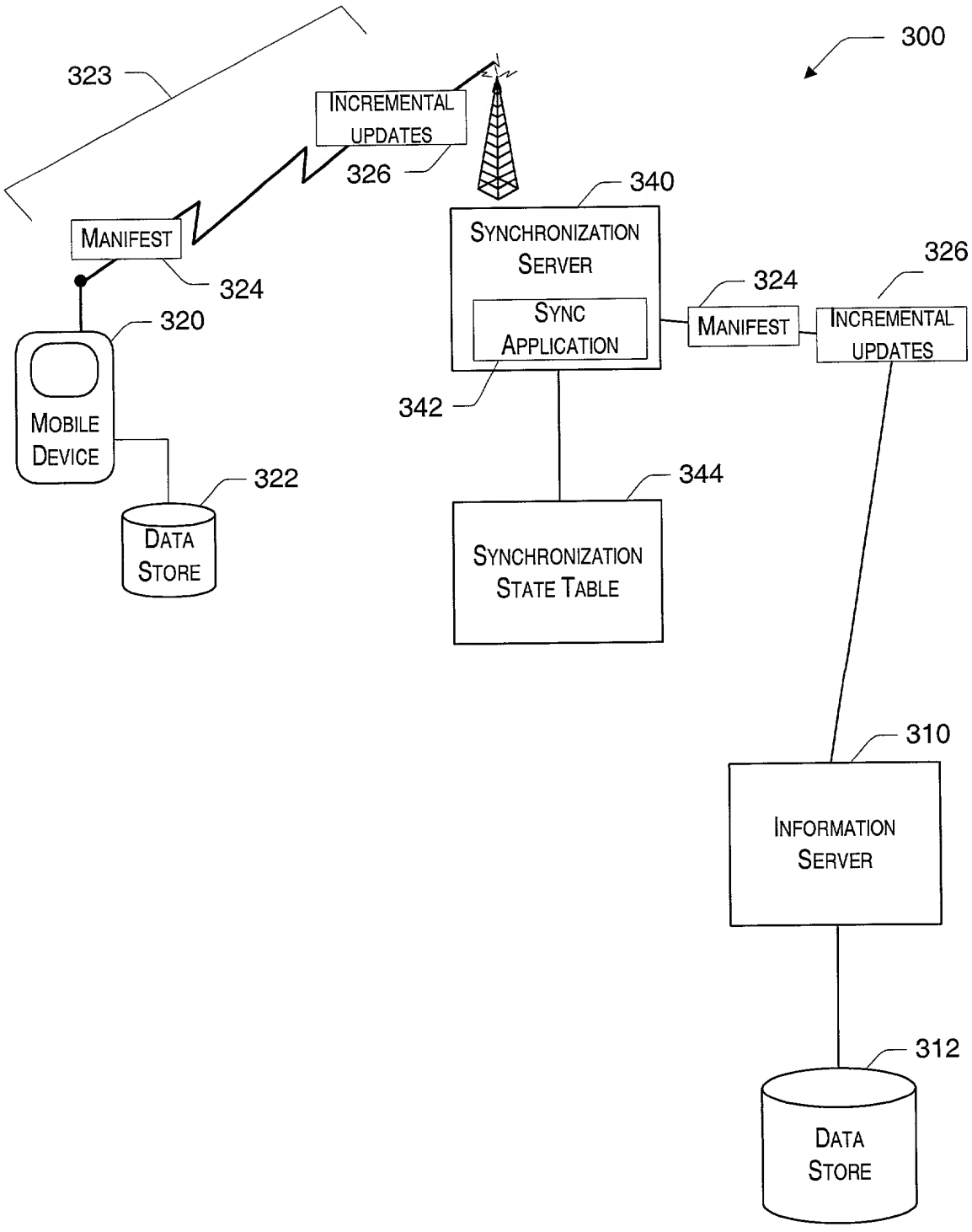
300
323
INCREMENTAL UPDATES
326
340
MANIFEST
SYNCHRONIZATION SERVER
SYNC APPLICATION
324
326
324
MANIFEST
INCREMENTAL UPDATES
320
MOBILE DEVICE
342
322
DATA STORE
344
SYNCHRONIZATION STATE TABLE
310
INFORMATION SERVER
312
DATA STORE

Fig.3

Steps	Client	Server
1	Initial Sync Key	Receive Request
2		Process Request
3	Receive Entries	Return Changed Entries
4	SyncKey 1 + Updates since Step 1	Receive Request
5		Process Request
6	Receive Entries	Return Updated Entries
7	SyncKey 2 + updates since Step 4	Receive Request
8		Process Request
9	SyncKey 2 + updates since Step 4	Process Request
10		Return Updated Entries

EXPRESS MAIL NO. EV 339 920 705 US

Fig.4

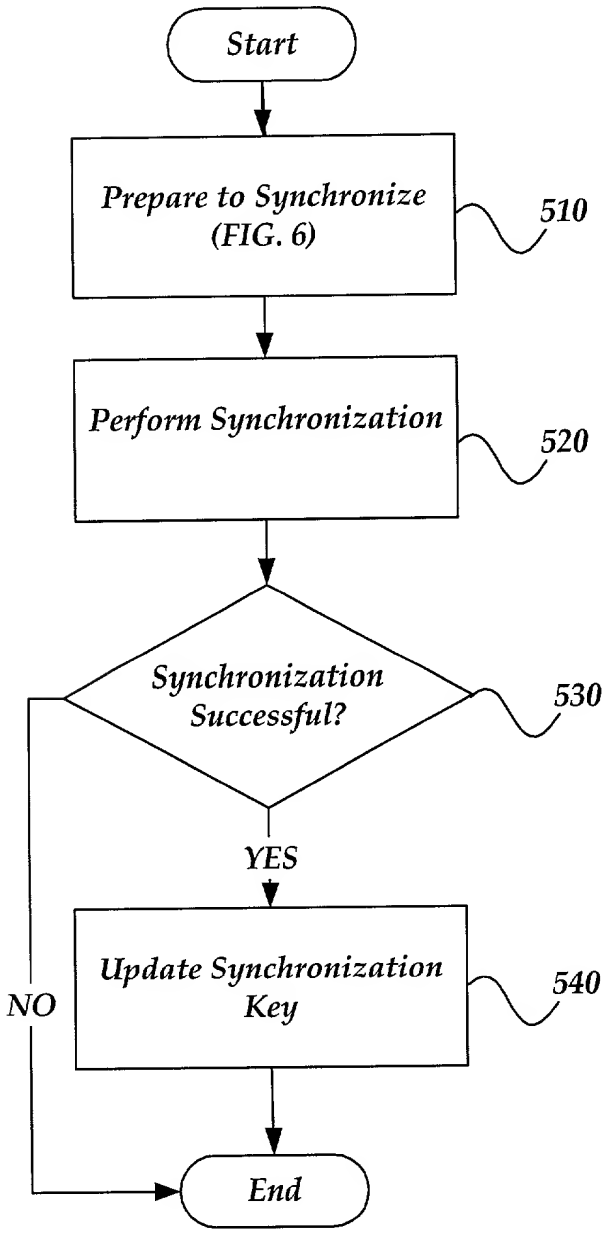
Start
Prepare to Synchronize (FIG. 6)
510
Perform Synchronization
520
Synchronization Successful?
530
YES
NO
Update Synchronization Key
540
End

Fig.5

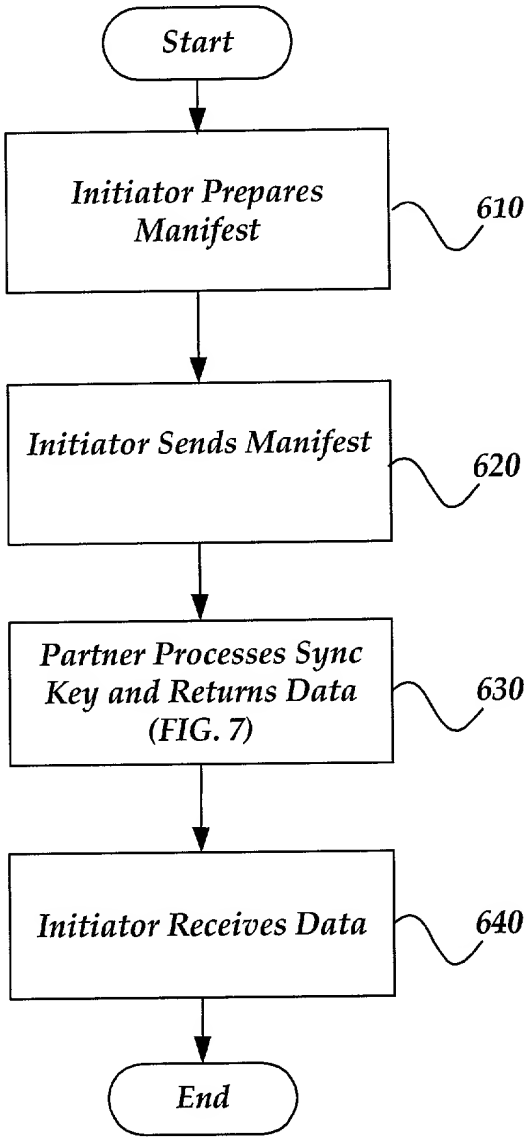
Start
Initiator Prepares Manifest
610
Initiator Sends Manifest
620
Partner Processes Sync Key and Returns Data (FIG. 7)
630
Initiator Receives Data
640
End

Fig.6

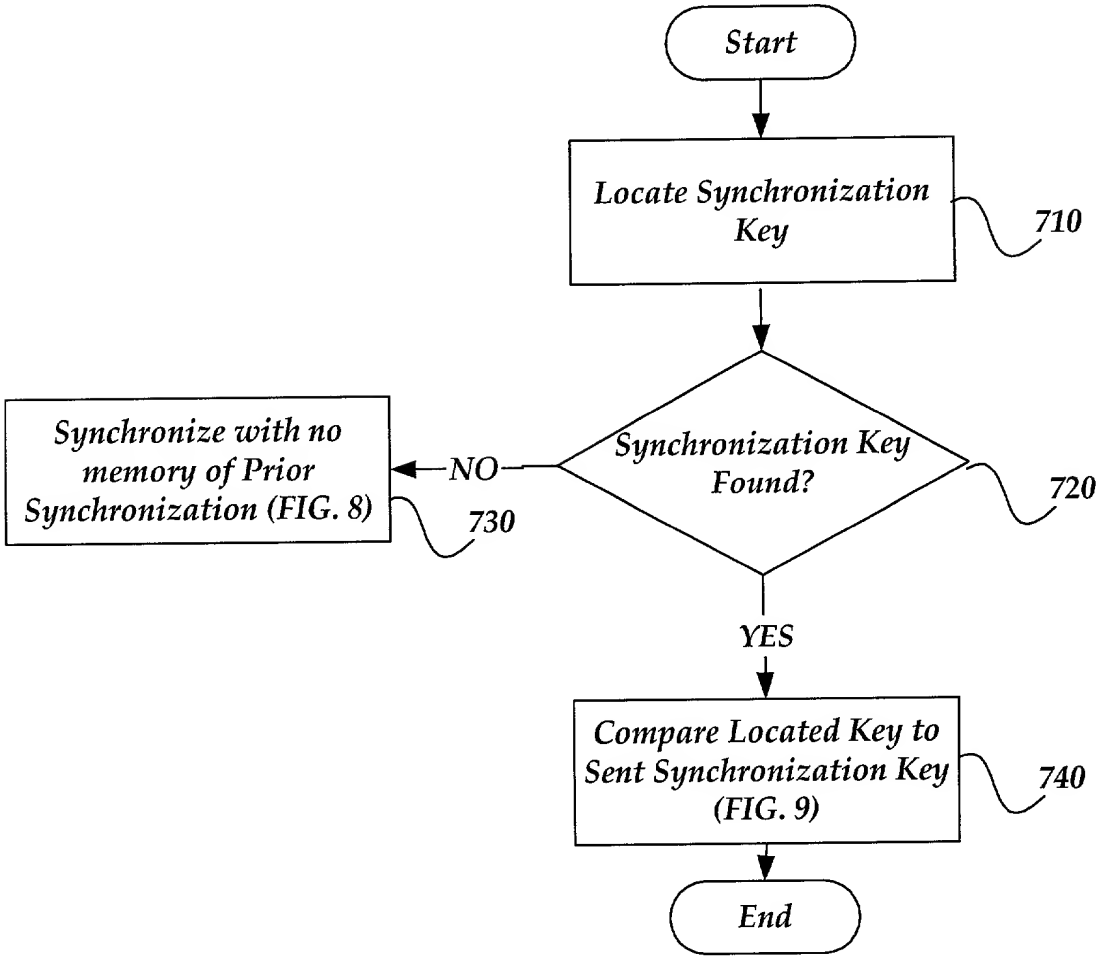
Start
Locate Synchronization Key
710
Synchronization Key Found?
720
NO
Synchronize with no memory of Prior Synchronization (FIG. 8)
730
YES
Compare Located Key to Sent Synchronization Key (FIG. 9)
740
End

Fig.7

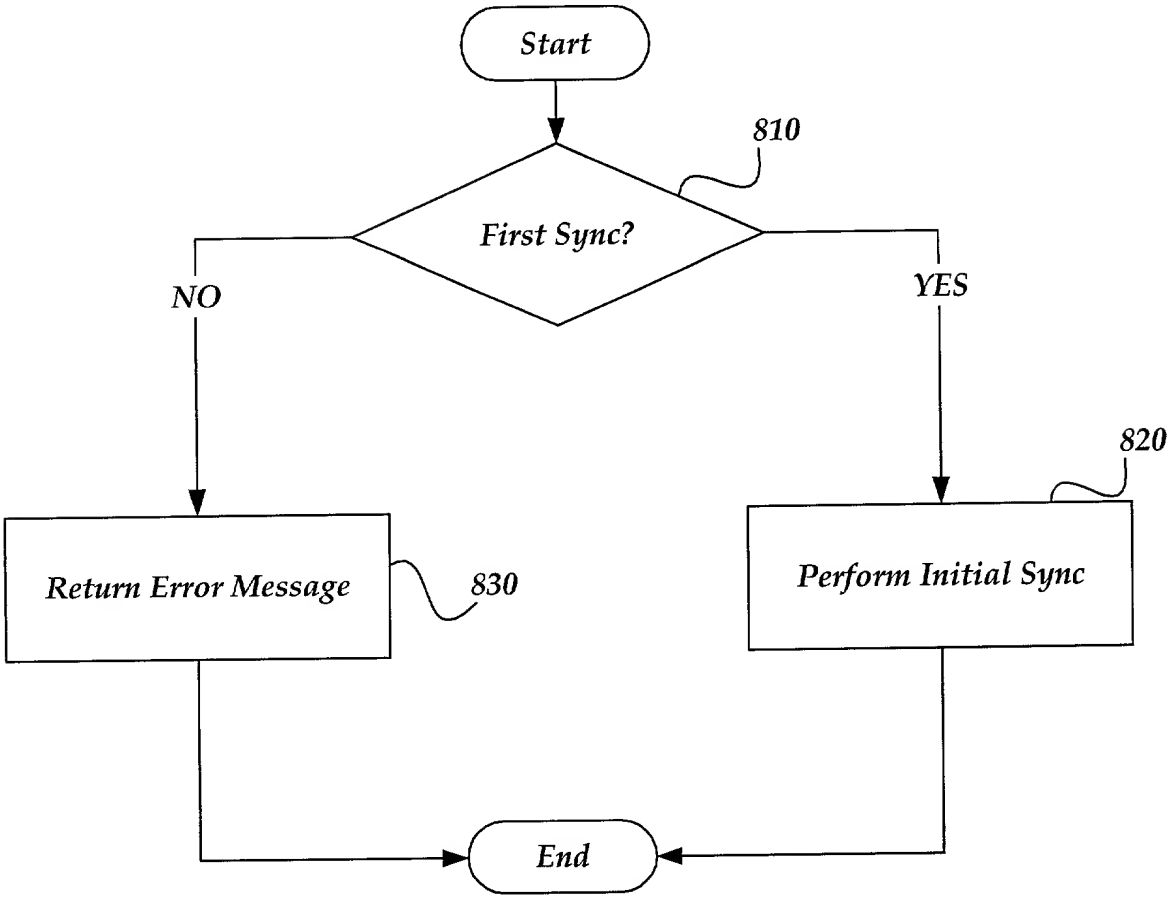
Start
810
First Sync?
NO
YES
820
Return Error Message
830
Perform Initial Sync
End

Fig.8

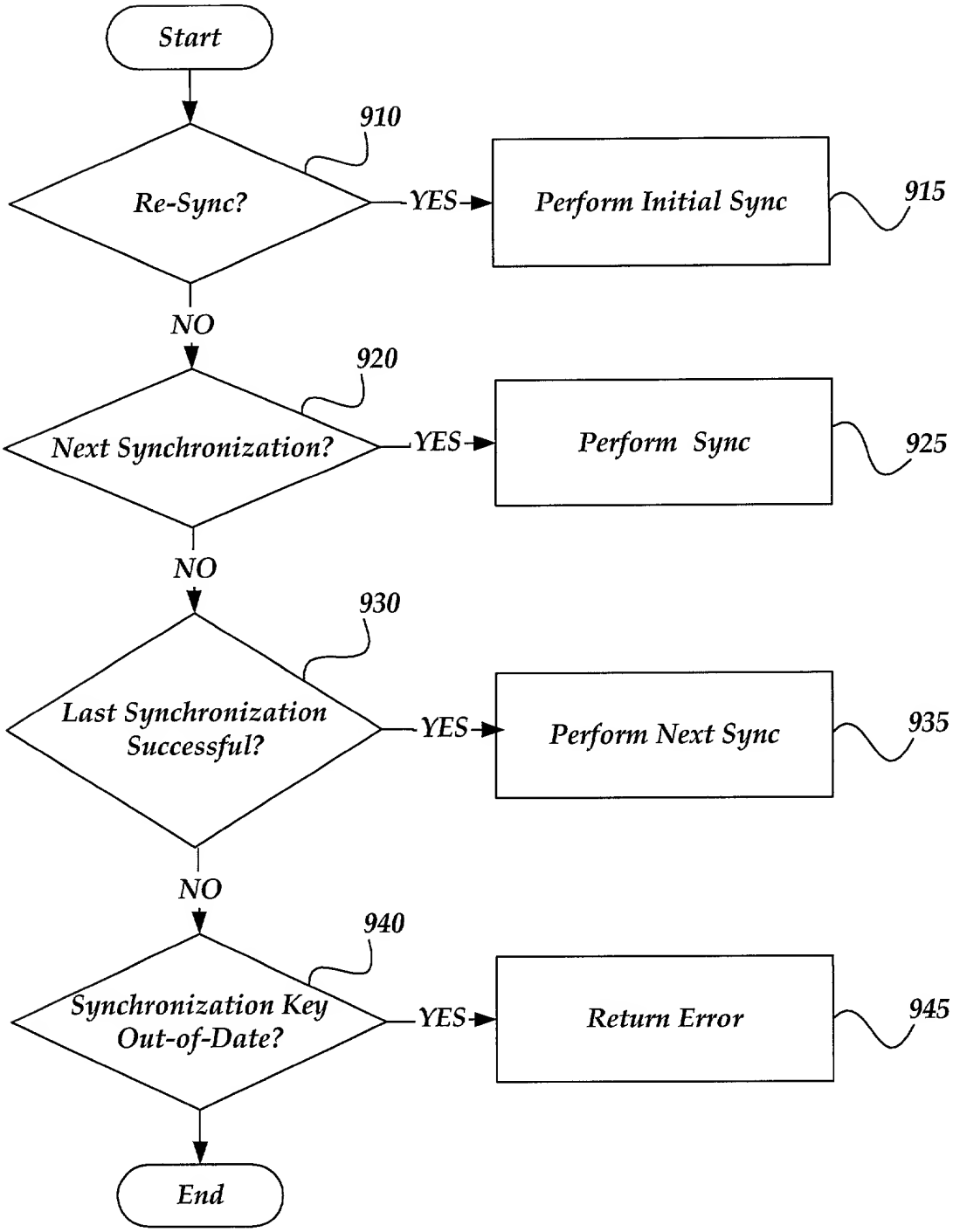
Start
910
Re-Sync?
YES
Perform Initial Sync
915
NO
920
Next Synchronization?
YES
Perform Sync
925
NO
930
Last Synchronization Successful?
YES
Perform Next Sync
935
NO
940
Synchronization Key Out-of-Date?
YES
Return Error
945
End

Fig.9